L Number	Hits	Search Text	DB	Time stamp
1	0	(in adj suti) and (mask or negative) and (printing adj plate)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/12/09 12:07
2	7251	(mask or negative) and (printing adj plate)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/12/09 12:49
3	363	leuco and ((mask or negative) and (printing adj plate))	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/12/09 12:07
4	213	((leuco and ((mask or negative) and (printing adj plate))) and (infrared or cyanine or phthalocyanine or photothermal or oxonol or polymethine))	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/12/09 12:10
5	194	((leuco and ((mask or negative) and (printing adj plate))) and (infrared or cyanine or phthalocyanine or photothermal or oxonol or polymethine))	USPAT	2002/12/09 12:10
6	0	((leuco and ((mask or negative) and (printing adj plate))) and (infrared or cyanine or phthalocyanine or photothermal or oxonol or polymethine))	EPO	2002/12/09 12:10
7	0	((leuco and ((mask or negative) and (printing adj plate))) and (infrared or cyanine or phthalocyanine or photothermal or oxonol or polymethine))	JPO	2002/12/09 12:48
8	18	((leuco and ((mask or negative) and (printing adj plate))) and (infrared or cyanine or phthalocyanine or photothermal or oxonol or polymethine))	US-PGPUB	2002/12/09 12:48
10	162	(((leuco and ((mask or negative) and (printing adj plate))) and (infrared or cyanine or phthalocyanine or photothermal or oxonol or polymethine))) and (color colored colorable)	USPAT	2002/12/09 12:41
11	136	((((leuco and ((mask or negative) and (printing adj plate))) and (infrared or cyanine or phthalocyanine or photothermal or oxonol or polymethine))) and (color colored colorable)) not silver.ab.	USPAT	2002/12/09 12:48
12	28	(exposure adj (indicator indicators indicating)) with dye	USPAT	2002/12/09 12:55
13	21	(((exposure adj (indicator indicators indicating)) with dye) and (infrared or cyanine or phthalocyanine or photothermal or oxonol or polymethine))	USPAT	2002/12/09 12:55
15	1	(exposure adj (indicator indicators indicating)) with dye	EPO; JPO	2002/12/09 12:55
16	0	(((exposure adj (indicator indicators indicating)) with dye) and (infrared or cyanine or phthalocyanine or photothermal or oxonol or polymethine))	EPO; JPO	2002/12/09 12:49
14	17	((((exposure adj (indicator indicators indicating)) with dye) and (infrared or cyanine or phthalocyanine or photothermal or oxonol or polymethine))) and (printing adj plate)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/12/09 12:49
18	8	(exposure adj (indicator indicators indicating)) with dye	US-PGPUB; DERWENT; IBM_TDB	2002/12/09 12:55
19	2	(((exposure adj (indicator indicators indicating)) with dye) and (infrared or cyanine or phthalocyanine or photothermal or oxonol or polymethine))	US-PGPUB; DERWENT; IBM_TDB	2002/12/09 12:56
22	75	((crystal adj violet) and (infrared or cyanine or phthalocyanine or photothermal or oxonol or polymethine)) and (printing adj plate)	USPAT; US-PGPUB; DERWENT; IBM_TDB	2002/12/09 12:57
23	2001	(crystal adj violet) and (infrared or cyanine or phthalocyanine or photothermal or oxonol or polymethine)	USPAT; US-PGPUB; DERWENT; IBM_TDB	2002/12/09 13:11
24	493	((crystal adj violet) and (infrared or cyanine or phthalocyanine or photothermal or oxonol or polymethine)) and (printing adj plate)	USPAT; US-PGPUB; DERWENT; IBM_TDB	2002/12/09 13:08

25	44	(((crystal adj violet) and (infrared or cyanine or phthalocyanine or photothermal or oxonol or polymethine)) and (printing adj plate)) and 430/273.1.ccls.	USPAT; US-PGPUB; DERWENT; IBM_TDB	2002/12/09 13:09
26	40	((((crystal adj violet) and (infrared or cyanine or phthalocyanine or photothermal or oxonol or polymethine)) and (printing adj plate)) and 430/273.1.ccls.) not ((((exposure adj (indicator indicators indicating)) with dye) and (infrared or cyanine or phthalocyanine or photothermal or oxonol or polymethine)))	USPAT; US-PGPUB; DERWENT; IBM_TDB	2002/12/09 13:09
28	80	tanaka-shinji$.in.	USPAT; US-PGPUB; DERWENT; IBM_TDB	2002/12/09 13:10
29	12	uehara-katsuhiro$.in.	USPAT; US-PGPUB; DERWENT; IBM_TDB	2002/12/09 13:11
30	0	tanaka-shinji$.in. and (printing adj plate) and ((crystal adj violet) or leuco) and (infrared or cyanine or phthalocyanine or photothermal or oxonol or polymethine)	USPAT; US-PGPUB; DERWENT; IBM_TDB	2002/12/09 13:11
31	0	uehara-katsuhiro$.in. and (printing adj plate) and ((crystal adj violet) or leuco) and (infrared or cyanine or phthalocyanine or photothermal or oxonol or polymethine)	USPAT; US-PGPUB; DERWENT; IBM_TDB	2002/12/09 13:11
33	0	uehara-katsuhiro$.in. and (printing adj plate) and (infrared or cyanine or phthalocyanine or photothermal or oxonol or polymethine)	USPAT; US-PGPUB; DERWENT; IBM_TDB	2002/12/09 13:12
32	1	tanaka-shinji$.in. and (printing adj plate) and (infrared or cyanine or phthalocyanine or photothermal or oxonol or polymethine)	USPAT; US-PGPUB; DERWENT; IBM_TDB	2002/12/09 13:12
27	33	(((((crystal adj violet) and (infrared or cyanine or phthalocyanine or photothermal or oxonol or polymethine)) and (printing adj plate)) and 430/273.1.ccls.) not ((((exposure adj (indicator indicators indicating)) with dye) and (infrared or cyanine or phthalocyanine or photothermal or oxonol or polymethine)))) not (((((leuco and ((mask or negative) and (printing adj plate))) and (infrared or cyanine or phthalocyanine or photothermal or oxonol or polymethine))) and (color colored colorable)) not silver.ab.)	USPAT; US-PGPUB; DERWENT; IBM_TDB	2002/12/09 13:12

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2	5	hitachi-ltd.asn. and photosensitive	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/12/09 17:13
3	143	hitachi-chem$.asn. and photosensitive	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/12/09 17:13
4	9	(hitachi-chem$.asn. and photosensitive) and colored	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/12/09 17:15
5	0	masaichi-uchino.in.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/12/09 17:16
6	0	takao-iwayagi.in.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/12/09 17:16
7	0	michiaki-hashimoto.in.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/12/09 17:16
8	0	minoru-choka.in.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/12/09 17:16
9	0	takanori-kudo.in.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/12/09 17:15
10	89	kudo-takanori.in.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/12/09 17:15
11	1	choka-minoru.in.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/12/09 17:16
12	225	hashimoto-michiaki.in.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/12/09 17:16
13	67	iwayagi-takao.in.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/12/09 17:16
14	93	uchino-masaichi.in.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/12/09 17:16
15	1	uchino-masaichi.in. and colored	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/12/09 17:17
17	11	hashimoto-michiaki.in. and colored	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/12/09 17:18

18	0	choka-minoru.in. and colored	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/12/09 17:17
16	1	iwayagi-takao.in. and colored	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/12/09 17:27
19	5	kudo-takanori.in. and colored	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/12/09 17:17
20	10	(hashimoto-michiaki.in. and colored) not (kudo-takanori.in. and colored)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/12/09 17:18
21	20188	toyobo$.asn.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/12/09 17:27
22	13	toyobo$.asn. and satomi-hiroshi.in.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/12/09 17:27
23	6	(toyobo$.asn. and satomi-hiroshi.in.) and imahashi-satoshi.in.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2002/12/09 17:28

PATENT ABSTRACTS OF JAPAN

(11)Publication number : **11-352670**
(43)Date of publication of application : **24.12.1999**

(51)Int.CI. **G03F 7/00**
G03F 7/095

(21)Application number : **10-156217**
(22)Date of filing : **04.06.1998**

(71)Applicant : **TOYOBO CO LTD**
(72)Inventor : **SATOMI HIROSHI**
IMAHASHI SATOSHI

(54) PHOTOSENSITIVE ORIGINAL PRINTING PLATE AND FORMATION OF PRINTING PLATE

(57)Abstract:
PROBLEM TO BE SOLVED: To obtain a flexographic original printing plate capable of forming a mask with laser beam and with non-development.
SOLUTION: The photosensitive original printing plate is formed by laminating (A) a photopolymerizable layer containing at least an elastomer based binder, an ethylenic unsaturated compound and a photopolymerization initiator having photosensitivity to non-infrared active ray, (B) an infrared light-heat converting layer having a material capable of converting the (B-a) infrared ray to the heat and a mask forming layer having a heat sensitive layer, which becomes substantially opaque by the (B-a) heat, and if necessary, (C) a cover film in this order.

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[Date of registration]
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[Date of requesting appeal against examiner's decision of rejection]
[Date of extinction of right]

abstract only available on PAJ

PATENT ABSTRACTS OF JAPAN

* cited in the PCT search report

(11)Publication number : 01-133044
(43)Date of publication of application : 25.05.1989

(51)Int.CI. G03C 1/00
G03C 5/08
G03F 7/00
H01L 21/30

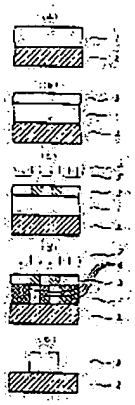
(21)Application number : 62-289335
(22)Date of filing : 18.11.1987

(71)Applicant : HITACHI LTD
HITACHI CHEM CO LTD

(72)Inventor : UCHINO MASAICHI
IWAYAGI TAKAO
HASHIMOTO MICHIAKI
CHOKAI MINORU
KUDO TAKANORI

(54) PATTERN FORMING METHOD

(57)Abstract:
PURPOSE: To obtain high resolution and high contrast by executing pattern transfer with short wavelength light and executing exposing of a resist with light of a long wavelength which is not so strongly absorbed by the resist.
CONSTITUTION: A photoresist layer 1 is formed on a substrate 2 and a photosensitive layer 3 which is colored by exposing is formed on the photoresist layer 1. Prescribed patterns are projected on the photosensitive layer 3 to change the light transmissivity of the photosensitive layer 3 in accordance with the patterns. The photoresist layer 6 is irradiated with the light 7 of the longer wavelength than the wavelength of the irradiation light through the photosensitive layer 3 to remove the photosensitive layer 3 and the develop the photoresist layer 6. High resolution and high contrast are obtd.



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* only abstract for 01-133044 available online translation submitted

PATENT ABSTRACTS OF JAPAN

(11)Publication number : **04-075060**
(43)Date of publication of application : **10.03.1992**

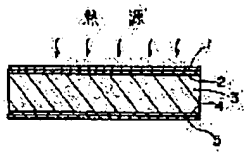
(51)Int.CI. **G03F 7/004**
B32B 7/02
B32B 31/26
G03F 7/00

(21)Application number : **02-187266**
(22)Date of filing : **17.07.1990**

(71)Applicant : **ASAHI CHEM IND CO LTD**
(72)Inventor : **NAKAMURA SHOHEI**
TAKAHASHI KATSUHIRO

(54) PRODUCTION OF CONSTITUTING BODY FOR PHOTOSENSITIVE ELASTOMER COMPOSITION

(57)Abstract:
PURPOSE: To obtain a flexographic printing plate having the good contrast of plate surface when a relief surface area is colored to the color different from a non-image part by heating the constituting body with a heat source of a specific temp. from a cover sheet side.
CONSTITUTION: The constituting body formed by successively laminating a base film 5 having an adhesive layer 4, a photosensitive elastomer compsn. layer 3, a solvent-soluble or swellable polymer layer 2 contg. a dye of an azo metal complex salt system, and a cover sheet 1 is heated with the heat source of 150 to 170°C from the cover sheet 1 side at the time of producing this constituting body. The heating is executed until the relief surface part is sufficiently colored according to the kind of the dye and the kind and thickness of the solvent-soluble or swellable polymer. Only the relief surface part is colored in this way. The process for producing printing plates by using the photosensitive elastomer compsn. constituting body having the sufficient plate contrast is obtd.



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[Date of extinction of right]

PATENT ABSTRACTS OF JAPAN

(11)Publication number : **11-221977**
(43)Date of publication of application : **17.08.1999**

(51)Int.CI. **B41N 1/14**
G03F 7/00
G03F 7/004
G03F 7/004

(21)Application number : **10-317679**
(22)Date of filing : **09.11.1998**

(71)Applicant : **TORAY IND INC**
(72)Inventor : **GOTO KAZUOKI**
ICHIKAWA SHIGEHIKO
IKEDA NORIMASA

(30)Priority
Priority number : **09305673** Priority date : **07.11.1997** Priority country : **JP**

(54) DIRECT DRAWING TYPE PRINTING PLATE ORIGINAL PLATE

(57)Abstract:
PROBLEM TO BE SOLVED: To manufacture a direct drawing type water-less lithographic printing plate of a favorable image reproducibility without requiring a complicated process after the radiation of laser beam by a method wherein an optothermal converting substance and a metal chelating compound are contained in a heat- sensitive layer which is provided on a base material of the printing plate.
SOLUTION: For this direct drawing type printing plate original plate wherein an image formation from a recording head is directly performed on the printing plate without negative and positive films at the time of exposure, an image is formed by the radiation of laser beam, and for this reason, an optothermal converting substance is contained in a heat-sensitive layer which is provided on a base material. The optothermal converting substance is not especially limited as long as being a substance which absorbs laser beam, and black pigment such as carbon black, aniline black, and phthalocyanine or naphthalocyanine based green pigment or the like can be used. Also, in the heat-sensitive layer, a metal chelating compound such as metal diketonate, metal alkoxide, and an alkyl metal is contained, and at the same time, an active hydrogen group-containing compound is contained when necessary.

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PATENT ABSTRACTS OF JAPAN

(11)Publication number : **11-231510**
(43)Date of publication of application : **27.08.1999**

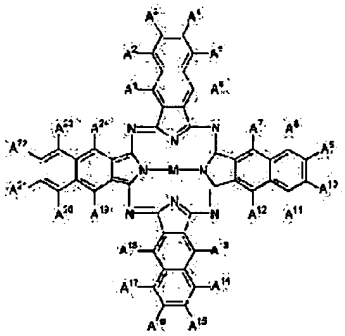
(51)Int.CI. **G03F 7/00**
B41M 5/26
B41N 1/14
G03F 7/004

(21)Application number : **10-032907**
(22)Date of filing : **16.02.1998**

(71)Applicant : **MITSUI CHEM INC**
YAMAMOTO CHEM INC
(72)Inventor : **OI TATSU**
MATSUZAKI YORIAKI
KOUGO OSAMU

(54) PHOTOTHERMOCONVERSION MATERIAL

(57)Abstract:
PROBLEM TO BE SOLVED: To obtain the photothermoconversion material good in sensitivity to laser beams and high in photothermoconversion efficiency and easy in processing for various kinds of uses by using a naphthalocyanine compound specified in structure as the photothermoconversion material.
SOLUTION: This photothermoconversion material contains the naphthalocyanine compound represented by the formula in which each of A1-A24 is, independently, an H or halogen atom; and M is 2 H atoms, a divalent metal, a trivalent metal derivative, or a tetravalent metal derivative. This photothermoconversion material has high sensitivity to semiconductor laser beams having a light emission region of near infrared rays (750 nm-1000 nm), and a high photothermoconversion efficiency, and so, it can be used for various kinds of uses. This naphthalocyanine compound is especially adapted to manufacture of the photothermoconversion layer of the photothermoconversion material for directly forming a lithographic printing plate by incorporating this compound in various kinds of binder resins to be used for these purposes.



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